

# **Downtown and Waterfront Master Plan**

## **Detailed Project Description and Scope of Work**

### **Purpose and Outcomes**

#### **Introduction and Project Overview**

Burlington is Vermont's largest city with a population of ~40,000 nestled on the eastern shore of Lake Champlain. Burlington is home to the University of Vermont and Champlain College, and national companies including Burton Snowboards and Lake Champlain Chocolates to name a few. Noted as the birthplace of Ben and Jerry's Ice Cream and the band Phish, Burlington has been widely celebrated as one of America's most livable communities. Burlington has been recognized as one of *Outside* magazine's original "Dream Towns;" "Healthiest City in the USA" by the US Centers for Disease Control and Prevention, and most recently *Kiplinger's Personal Finance* as one of the "10 Best Cities for the Next Decade" to name only a few. In 2008 Burlington's Church Street Marketplace was recognized by the American Planning Association as one of 10 "Great Places in America."

The City of Burlington is recognized nationally as a leader in the sustainable development movement and was recently recognized by the U.S. Conference of Mayors for innovative practices designed to increase energy efficiency and combat global warming, and as one of 13 municipalities in North America for Best Energy Management Practices by the Commission for Environmental Cooperation. In 2000, Burlington became one of the first cities in the country to articulate a community vision based on the principles of sustainable development with the adoption of the *Legacy Project Action Plan*. This plan places the social, economic, cultural and physical development of the City within a larger ecological context recognizing the limits in the resources it can provide and the waste that it can absorb. At the same time, Burlington adopted its first *Climate Action Plan* to begin to confront the issue of climate change. This Plan recommended a carbon emission reduction goal of 156,000 equivalent tons of CO<sub>2</sub> – or 10 percent below 1997 levels through greater energy efficiency, alternative fuels and energy systems, travel demand management, and public education. Burlington is currently finalizing a revised *Climate Action Plan* which adopts a more aggressive goal (80% below 2007 levels by 2050) and targeted actions selected after analysis of anticipated costs and benefits.

Despite all the accolades and apparent successes, Burlington faces many challenges. It is home to Vermont's lowest income neighborhoods, a growing refugee resettlement community (there are 53 different languages spoken in our community), and a high concentration of special needs housing and social services. We have an extremely low housing vacancy rate which puts significant upward pressure on rental and ownership costs. We have an extremely low commercial vacancy rate and very high rents, yet developers are not responding to add supply. We have several substantial redevelopment opportunities and many smaller infill sites, yet high development costs, permitting complexities, potential public opposition and a small market poses significant obstacles to creating economically viable projects. We are surrounded by suburban and rural communities where land and development costs and complexities are significantly lower.

Burlington struggles to address complex urban challenges in a small, under-resourced New England community with big ideas and even bigger ideals. We struggle with how to really become the community we say we want to be?

The City of Burlington is seeking funding to support the preparation of a master land use and development plan for its Downtown and Waterfront area (see map on p.14). The overall objective of this effort is to "Provide a comprehensive guide for Downtown and Downtown Waterfront development that fosters sustainable economic growth over the next 10-20 year period." The plan will refine broad city-wide goals for sustainable development into focused, actionable, area-specific strategies to ensure the vitality of the central core of our community and enable us to achieve our community vision.

The development of a master land use and development plan for Burlington's Downtown and Waterfront has been a long-standing action-item in the City Municipal Development Plan since at least 1996. In September 2009, the City Planning Commission and Dept. of Planning & Zoning were directed by the City Council to develop a scope of work, timeline, and budget for such a project. While many other planning efforts involving the downtown or waterfront have taken place over the years, none have been as comprehensive in scope and strategic in design. The planning process will place an emphasis on ways to promote and improve mixed uses and quality urban design, affordable and workforce housing, transportation and parking management, and the quality and capacity of public infrastructure. Our intent is to identify, understand, and address current barriers to the creation of new infill development. At the same time we need to make the hard decisions necessary to facilitate the continued evolution and maturation of this vital and dynamic mixed use district. This effort is the Department and Commission's highest priority planning project, yet sufficient funding to undertake such an ambitious effort has remained a challenge.

The project is intended to address the following problems and barriers to success:

- lack of a coherent and shared vision for the development of the downtown and waterfront which fuels public opposition to new development
- lack of available information/education regarding economic impact of downtown and waterfront – particularly for local property owners/tax-payers
- lack of available information/education regarding the state and needs of public infrastructure necessary to support existing and future development
- lack of specificity of development regulations with regard to urban design objectives and standards which facilitates public opposition to new development and appeals of local regulatory decisions.
- failure of the real estate market to produce necessary housing opportunities and business expansion.
- flight of expanding business to suburbs in search of larger spaces, lower costs and easier access.
- lack of workforce housing opportunities for young professionals, singles, couples and empty-nesters
- extremely tight and expensive real estate market
- limited available supply of parking
- traffic congestion through very limited access points into and out of the city

This Plan will provide recommendations, tools, and strategies that will help us to achieve the following goals and outcomes:

1. Maintain Burlington as a regional population and economic center that offers meaningful jobs at livable wages and a diverse housing stock that serves all incomes, while encouraging the continued growth of the city's commercial tax base.
2. Promote urban development measures that facilitate economically competitive, environmentally sound, socially responsible, and aesthetically-pleasing land-use combinations and urban design elements.
3. Emphasize the importance of preserving historic and cultural features and architecture, and encouraging high-quality building design to compliment the existing fabric.
4. Strengthen the linkages between the Downtown, Downtown Waterfront, and surrounding neighborhoods, including the Hill institutions (University of Vermont, Champlain College, and Fletcher Allen Health Care).
5. Promote a mix of land uses including the need for affordable/workforce housing, both local and world class businesses, entertainment and culture, live/work spaces, etc.
6. Provide a focused sustainable transportation and accessibility system within the context of the existing street network and emphasizing alternatives to the single occupancy

vehicle (SOV). This should build upon the Complete Streets system and Street Design Guidelines already included in the soon-to-be-completed Citywide Transportation Plan

7. Provide a comprehensive parking allocation and management system that meets visitor, business, and resident needs consistent with the goal of increasing public transit and reducing dependence on the single-passenger automobile.
8. Provide the quality and capacity of public infrastructure, including pedestrian, bicycle, parking, and/or transit-related facilities, necessary to support new or expanded commercial and residential development.
9. Strengthen Burlington's leadership position in clean energy and climate action planning by enabling broad-based community participation in the identification, quantification, visualization, and decision-making related to the energy and greenhouse gas impacts.
10. Provide the foundation for the development of a Form Based Code for the Downtown and Downtown Waterfront to guide and regulate future development in a coherent and consistent manner centered on urban form, design, and performance.
11. Use existing commissions/committees as a vehicle for informing the public and interested stakeholders about the plan and getting them involved in the planning process and implementation phase; involve all interested parties through a charrette method.

*For more detailed information on project performance measures and outcomes, see the Scope of Work beginning on page 7.*

### **Livability Principles**

- ***Provide More Transportation Choices.***

Fundamental to Burlington's overall land use and development policies for more than 20 years are efforts that emphasize the expansion of transportation choices. These include policies that seek to concentrate mixed use development in places where neighborhood goods and services are within easy access on foot, bike or transit (we call these "neighborhood activity centers"); policies that strongly support the expansion of public transit systems and the use of transportation demand management strategies; and policies that seek to ensure that the transportation system in the city is accommodating to all modes to the extent practicable through the adoption of a "complete streets" policy.

Burlington is at the center of the regional transit system where all but 2 of 16 routes pass directly through the city's downtown area, and 7 serve Burlington exclusively. The transit system operates 3 inter-county commuter routes which have become increasingly attractive as gas prices and public concerns about climate change rise. These commuter routes (to the communities of St. Albans to the north, Montpelier to the east and Middlebury to the south) form a template for what could someday become a regional commuter rail network.

However, in order for Burlington to be more successful at supporting and facilitating greater transportation choice, we need to play a larger regional role as a place to both live and work. 71% of TANF families with a work requirement have an identified transportation as a barrier. The more people that live in the city, the greater access they have to a wider range of transportation choices (walk, bike and transit), and by extension the more convenient and economically viable those choices become. The same holds true for increasing the number of people that work in Burlington. This can increase the number of commuters who can and will take advantage of regional commuter services. One of Burlington's greatest downtown challenges is the availability of parking. However, if we are successful at increasing the availability of transportation choices we can more easily accommodate additional downtown workers and residents without adding significant amounts of parking thus leaving more land available for greater economic use. In fact the reality is that Burlington has not been keeping pace with the rest of the region in terms of population and employment growth and has steadily been losing share to outlying suburban communities.

The creation of a district plan for Burlington's Downtown and Waterfront will enable the City and area stakeholders to focus their attention on that part of the city that holds the greatest

opportunity for concentrated and higher density mixed use development, and strengthen the underlying foundation for the continued expansion of regional public transit service and improvements for pedestrians and cyclists. Particular attention will be paid to understand current and anticipated parking demand, and to develop a range of strategies to better manage a constrained supply. Further, the district plan will consider in greater detail specific opportunities to implement the City's new Complete Streets policy and street design guidelines as described in the soon-to-be-adopted City Transportation Plan (anticipated to be adopted by the City Council in Sept. 2010). This Plan envisions a series of "complete" and "transit" streets providing access to the downtown area which itself is a network of "slow" streets that favor pedestrians and cyclists.

- ***Promote equitable, affordable housing.***

Burlington is a local and national leader in regard to the creation and protection of affordable housing that serves the needs of all ages, family-types and income-levels. Additionally, Burlington has been a national leader in collaborating with the non-profit sector to create and manage affordable housing projects as a mechanism to both expand the supply and ensure their permanent availability. An early adopter of inclusionary zoning (1990), Burlington has made the availability of housing for low income residents a high priority for more than two decades, and affordable housing continues to be the highest overall priority under the City's 2008 Consolidated Plan. Burlington has been the site for more than half of Chittenden County's affordable rental housing, and has recently completed a study examining barriers to fair housing choice.

However, Burlington's housing market is characterized by an imbalance between supply and demand, as reflected in low rental vacancy rates and limited inventory of homes for sale. Between June 1996 and June 2001, the rental vacancy rate in Chittenden County was below 1%. It has improved somewhat since then, but was only 1.7% in June 2010. As with rental units, the supply of ownership units is also out of balance with demand – particularly in the lower price ranges. This housing imbalance translates into high housing costs (relative to income) and an overall lack of affordability despite the City's ongoing efforts. The lack of supply has led to spiraling rent increases; left people unable to find housing; and is limiting economic growth.

Housing in Burlington's downtown area is a particular challenge. With a limited supply of available land, many feel that Burlington's traditional "central business district" should be reserved for non-residential use in response to recent market conditions where the city has seen great interest in building high-income housing downtown – particularly given the combination of high real estate values, market demand, and return on investment. This perspective is illustrated by a current zoning restriction that prohibits any more than 50% of the gross floor area of a new downtown project from being in a residential use. Yet others in the community appreciate the importance of downtown residential uses as critical to supporting economic vitality and transportation choices, and see the current zoning restriction as significantly depressing the market for all types of downtown development. This has set-up a policy debate that is central to our need to gain better clarity and consensus around our vision for the downtown's future.

Much of the new housing being created downtown is very expensive and caters to empty-nesters and seasonal residents. Fortunately, Burlington's inclusionary zoning requirement ensures a proportionate number of affordable units. However, this dynamic is creating a significant and widening void in the housing supply for units that are affordable to service and retail workers, new graduates and young professionals, struggling entrepreneurs and emerging artists – workforce housing. Ensuring that we have housing for this segment of the population is essential to nurturing Burlington's creative economy, urban vibrancy and economic competitiveness. With current cultural trends toward downtown living, there is great potential for expanding housing in the downtown. Additionally, by their nature and out of economic necessity these young urban professionals and entrepreneurs are among the most likely to take advantage of public transit or ride a bike thereby boosting ridership and viability of alternative transportation options.

The creation of a district plan will allow us to focus on the realities of our current downtown housing market, and engage in an important dialogue about how to best encourage and support future housing opportunities within the context of economic vitality. Of particular interest is

encouraging and supporting green development projects that meet or exceed LEED and local energy efficiency benchmarks.

- ***Enhance Economic Competitiveness.***

Burlington is the largest job center in Chittenden County, with approximately one-third (~33,000) of the county's total jobs. However, the city is steadily losing market share to suburban communities. From 1980 through 1989, job growth in Burlington (as well as in Chittenden County and in Vermont) outpaced the national rate. However, since then, Burlington's rate of growth has lagged behind largely caused by a lack of space, higher development costs, and lower rate of population growth when compared with neighboring communities (for 2008 Burlington's rate was 1.07 as compared to 1.22 in the County and 1.20 statewide).

Like many communities in the northeast, Burlington's economy has undergone a gradual shift away from traditional manufacturing to one that is increasingly dominated by the creative, professional and entertainment sectors. Total employment declined significantly in five sectors (manufacturing, retail trade, transportation and warehousing, information, and finance and insurance) since 1990, resulting in a loss of 2,168 jobs. At the same time, four other sectors grew significantly (professional, scientific and technical services; health care and social services; arts, entertainment and recreation; and government) creating 3,331 jobs over the same period.

Burlington's real estate market has seen a similar decline. As of June 2010, the downtown retail vacancy rate was close to the historic average at 8.2% with ~12% (~600,000 sqft) of the region's total retail space. The downtown office vacancy rate reached a historic high of 8.3% with a little more than 24% (1.56 million sqft) of the region's total. These compare to a suburban retail vacancy rate of 6.9% and office vacancy rate of 12.8%. Burlington's share of retail sales has declined from 21% in 2003 to 14% in 2009 - a 30% decrease. In the past decade, less than 10% of all office space built in Chittenden County was built in Burlington. Once again, this is a reflection of a lack of available space and the inability of the market to respond.

The creation of a district plan for Burlington's Downtown and Waterfront is really all about economic vitality and competitiveness. Whether we look at the affordability of housing, environmental quality, social equity, energy efficiency, transportation choice, urban design or public investments in infrastructure, the underlying purpose and objective is to nurture and strengthen our economic base. It is the lack of a stable and healthy economy that is truly the greatest barrier to achieving our vision of a sustainable community.

- ***Support Existing Communities.***

Since the mid-1800's, Burlington has been the heart of a larger region that is the principal economic and cultural engine for the northern Champlain Valley, as well as much of Vermont. The city itself is the largest, and the most intensely developed community in Vermont with a population more than two-times that of many of its neighbors. While Burlington makes-up only a small portion of the region in physical terms (~10 square miles), the surrounding area is often identified by its proximity to the city. The historic development pattern of the region is characteristic of New England with compact mixed use centers surrounded by working farms and forests, and served by basic infrastructure - the definition of what we in Vermont call a "growth center." These features define Vermont's unique identity, support our high quality of life, and form the qualities that attract new business development and tourism.

However, the region's traditional development pattern has become blurred and threatened by suburban development on the fringes of the city including large single-use developments such as shopping malls, strip commercial development along major highway corridors, and the continued dominance of the automobile with its associated parking lots, traffic congestion and ever-expanding highways. This trend is not only a threat to the region's traditional patterns of development, but also to Burlington's future economic growth, natural environment, and sense of community.

While Burlington remains a significant attraction for residents and businesses, if we are unable to absorb our fair share the excess demand forces additional pressure on surrounding

communities and rural landscapes. As such, the success of Burlington's downtown has both transportation and land use implications far beyond our borders. The City welcomes the opportunities and responsibilities associated with serving as the core of a regional growth center; however, we need to be able to fulfill this responsibility in a way that preserves Burlington's widely celebrated character and sense of place.

- ***Coordinate Policies and Leverage Investment.***

Good planning ensures that communities have up-to-date information, realistic objectives, and clear regulations to use in guiding land use and development decisions. However, funding for planning across Vermont is extremely limited and being cut further. There are very few other opportunities or partners that can combine with local funds to support major undertakings. Where there is significant funding, it is very often targeted for specific projects or programs like transportation, energy, housing or infrastructure. Yet without a clear and well-considered comprehensive context and plan, these efforts rarely achieve the full desired result.

The Community Challenge Planning Grant presents an important and unique opportunity for Burlington to undertake a significant planning process that will enable us to bring together many loosely defined goals into a clear and action-oriented plan for our community center during a period of great economic uncertainty and opportunity. Without the resources to undertake good planning now, Burlington will be less able to anticipate and respond to market forces, and emerge from this "Great Recession" quicker and prepared to address the opportunities ahead.

This planning process also comes at a time where there is an opportunity for collaboration with one of the most important community infrastructure projects the City has considered since creating a municipal telecommunications utility in 2002. Burlington's Electric Department and Community Economic Development Office are beginning an engineering feasibility study for the development of a district energy (DE) system.

As conceived, thermal energy (as hot water) from the McNeil Electric Generating Station - a 50 MW biomass fueled generating station operated and partially owned by Burlington Electric - would be piped into the downtown area and used for heating, domestic hot water and eventually cooling. The engineering feasibility will study the building of a low-temperature hot-water DE system which would be one of the first such systems in North America to use proven European technology that will significantly increase the efficiency of the plant from the current 25%. In other words, 75% of the heat generated within the plant is wasted - it goes through the cooling towers and flue and heats the air surrounding the plant. With proper design, it is possible to capture much of the "waste heat" in a DE system and increase the overall efficiency.

Burlington's project could serve as a model for systems throughout the country, increasing the efficiency of power plants, saving consumer's money, creating jobs and mitigating greenhouse gasses by replacing fossil fuels in each connected building with heat energy from the district energy system. This project emerged from the *2000 Climate Action Plan* and a 2010 cost-carbon-benefit analysis as the single most significant greenhouse emission reduction investment the community could undertake with the potential savings of \$4,273 per ton of avoided emissions.

- ***Value Communities and Neighborhoods.***

By nearly every definition, Burlington is a city. A city, however, at a smaller, Vermont scale. Burlington has tall buildings, but most remain under five to eight stories; an important airport and public transit; hospitals, colleges and a university, theaters and galleries, offices, restaurants, hotels, banks and shops - yet still only around 40,000 residents.

Burlington is also, in many ways, a traditional Vermont village in both form and function. The city is compact and serves as a central place of commerce, housing, education, industry, and government. People know local shop owners, and often encounter family and friends throughout their daily travels. This description as both city and village is the essence of what makes Burlington such an attractive place to live, work and visit and exemplifies the metaphor of the "urban village" - a of describing the feel we want from our cities. It is not so much a location, but the feeling of a place - its personality. Urban villages aren't built - they evolve.

Burlington's character and sense of place is widely celebrated – both locally and nationally. The city's character has evolved over time by respecting historical development patterns and architecture; cultivating “community” in our neighborhoods; protecting valuable natural, historic, and recreational resources; developing lively cultural events, resources and activities; and putting the needs of City residents above the desires of visitors.

However, as Burlington continues this evolution it must meet the challenge of continuing to accommodate future populations and development activity. Nurturing Burlington's human scale, social character, and sense of place while encouraging future growth and development is the primary objective of the City through the development and implementation of a master plan for the downtown and waterfront area.

## **Work Plan**

### **(1) Proposed Activities.**

#### **Task 1: Existing Conditions Analysis**

This first task proposes the preparation of a comprehensive inventory and assessment of existing conditions in the study area to identify the primary needs, challenges and opportunities. This assessment will provide the information and perspective necessary to develop a meaningful and realistic visioning and planning process, and will include the following sub-tasks:

##### **Sub-task 1.1: Development Inventory and Modeling**

This subtask includes components such as a digital 3D building modeling project, a land use inventory, and a build-out analysis of current zoning regulations. These three studies will assist Burlington in determining land available to meet our community's future land use needs. They will also estimate and describe the amount and the location of future development that may be allowed to occur within the study area under current development regulations.

##### **Sub-task 1.2: Urban Form & Design Analysis**

Components included in this subtask range from a building typology inventory; an analysis of potential shadow impacts and an inventory of viewsheds, and landmarks; an inventory of historic buildings and potential districts; and, an inventory of parks, open space and street trees. This analysis will allow the city to document and characterize important urban design elements within the study area, and, when combined with 3D building models, illustrate potential impacts and alternatives for new policy, regulations and development.

##### **Sub-task 1.3: Housing Analysis**

The housing needs assessment will collect, organize and analyze housing information identifying any outstanding gaps, needs and opportunities for downtown housing by type and market segment.

##### **Sub-task 1.4: Economic Analysis**

This sub-task includes: a real estate market analysis to understand the needs and opportunities for housing, office and retail space in our downtown and a retail feasibility study to understand existing gaps, limitations and opportunities.

##### **Sub-task 1.5: Existing Infrastructure Analysis**

An understanding of the capacity and limitations of existing infrastructure is essential. This sub-task will evaluate our existing water/wastewater, stormwater and telecommunications infrastructure so that capacity and future improvements can be taken into account during the planning process. Of particular interest will be opportunities for innovative stormwater management solutions to reduce peak discharge and improve water quality in the lake.

##### **Sub-task 1.6: Transportation, Parking and Traffic Demand Analysis**

This sub-task includes a study of existing conditions for all modes of transportation and the impacts of a possible build-out in Downtown Burlington. Building upon the 2003 Downtown

Parking Study and new Citywide Transportation Plan, an inventory of current parking and projected needs based on possible build-out will be developed, and alternative transportation demand and parking management solutions will be considered.

**Sub-task 1.7: Waterfront Revitalization Plan Update**

This sub-task will complete a progress report on 22 project elements in the *1998 Waterfront Revitalization Plan* to assess what has been completed, what hasn't, and why. This information will be necessary to advancing recommendations within the context of a more comprehensive land use plan.

**Sub-task 1.8: Climate Change and Energy Considerations**

This E analysis will enable the city to envision, define, and create a shared and desirable energy future focused on the downtown/waterfront planning area but applicable to the city at-large. Outcomes will include the identification and prioritization of energy cost saving and greenhouse gas (GHG) reduction opportunities, and future local renewable energy and energy efficiency investment opportunities.

**Sub-task 1.9: Cultural and Arts Facilities Needs Assessment**

The assessment includes an inventory of existing cultural and arts facilities, and will identify gaps and opportunities for expanding and enhancing this important component of our economy and contributor to our high quality of life.

**Sub-task 1.10: City Organizational/Operations Analysis**

This sub-task is an analysis of the city's own organizational structure and systems with regard to infrastructure and operations and will help identify deficiencies and/or improvement opportunities in how Burlington manages the downtown and waterfront district.

**Task 2: Downtown/Waterfront Master Planning Process**

**VISION for Downtown/Waterfront**

Burlington has gone through several processes to develop a vision for the city: the Legacy Project, the Municipal Development Plan, the Transportation Plan and the Waterfront Revitalization Plan. Each has included the development and/or reconsideration of a community vision. The formal kick-off to this planning effort will also re-evaluate, and re-affirm as appropriate, this evolving community vision which will guide the city in the preparation of the downtown and the waterfront plan.

**Downtown and Waterfront Master Planning**

This task will entail a significant public involvement process to develop, articulate and visualize future scenarios for the downtown and waterfront, and develop a consensus around priorities and objectives. The public process will be divided into four or more charrettes/workshops centered on topics including Urban Form and Design; Civic Life & Cultural Facilities; Streetscape and Transportation; and, Land Use and Environment. Information and analysis collected under Task 1 will be used to inform participants about needs, limitations and opportunities to be considered in order to ground the planning process in a real-world present-day context.

**Implementation Plan**

Building upon each of the previous tasks, specific actions and recommendations will be developed regarding how to best achieve the vision and plan articulated in Tasks 2 and 3. Examples will include: mechanisms for funding new development, redevelopment, and supporting infrastructure; regulatory mechanisms including a Form-Based Code; non-regulatory tools such as capital improvement planning, city operations and maintenance, development assistance/support, special events and marketing; and a monitoring process and performance measures to allow the City to closely evaluate the progress and impacts of the new Downtown and Waterfront Plan.



## **Drafting the Plan**

This task will include bringing together all of the information and recommendations into a single document for final presentation. Developing a document format that will be reader-friendly, accessible, and include visualization of the information conveyed will be essential.

## **Task 3: Form-Based Code Development**

The final task is the development of a form-based code for the study area. Form-based codes foster predictable built results and a high-quality public realm by using physical form (rather than separation of uses) as the organizing principle for the code. A form-based code includes: a regulating plan, public space standards, and building form standards. Additional elements that the City may consider are: architectural, landscaping, signage, and environmental resource standards.

## **Performance Measures and Outcomes**

Given that this project involves the development of a long-term plan whose success can only truly be measured by long-term outcomes, most directly grant-related performance measures and benchmarks must be related to the progress of the planning project itself. The completion of each task listed above within budget and on schedule will be the primary measure of progress for this project. Additionally, performance of the public outreach process can be measured as follows:

- ***Increased participation and decision-making***
  - diversity of outreach methods
  - overall number of participants (attend events, submit comments, etc)
  - age range of participants
  - extent of outreach to under-represented populations

Over time however, there is an opportunity to measure success based on objective performance outcomes related to actual investment and activity. Existing local and state data sources can be used as indicators, in addition to Census 2010 data that can be compared as a benchmark against Census 2020. Examples of these types of performance measures include:

- ***Travel changes***
  - Regional transit ridership with the Chittenden County Transit Authority (CCTA)
  - Participation in a Walk/Bike to Work Program
  - Reduction of Vehicle Miles Traveled (VMT)
  - Participation in a Transportation Management Assoc. (TMA)
  - Journey to Work – mode and commute distance/time
  - Car share memberships
- ***Impact on affordability and accessibility***
  - Diversity of housing affordability
  - Diversity of housing types to meet the needs of diverse populations
  - Walk/Bike to Work and CCTA ridership as a measure of reduced household transportation costs
  - Energy efficiency as a measure of reduced household costs
- ***Economic development***
  - Re/development permits/projects
  - Re/development Gross Floor Area (GFA)
  - Private reinvestment (\$)
  - Job creation and retention
  - State and local tax revenue (sales & use, rooms & meals, property)
- ***Improvement to the state of repair of infrastructure.***

- Public reinvestment to streets, sidewalks, curb, tree belt, water/wastewater/stormwater (extent and \$)
- ***Environmental benefits***
  - Greenhouse Gas (GHG) reduction
  - Regional development demand shift/absorption (land not developed in a less dense pattern)
  - stormwater runoff, wastewater overflow reduction
  - energy efficiency/use